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Agricultural Memorandum No 772

Sugar Beet Yields - England & Wales 1950-73

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Following the lines of Ag Mems 770 and 771, the 1950-73 yields were analysed with respect to the following factors:-

I = improvement factor. 1950 = 0 up to 1960 = 10 remaining at 10 thereafter

ET = effective transpiration April - September, mean of Felixstowe, Cranwell, Askhem Bryan, Mildenhall and Ross-on-Wye.

H = potential transpiration August and September, meaned as ET,

Then it was found

$$\text{Yield (Tons/acre)} = 0.44\,I + 0.64\,ET + 1.44\,H - 6.2$$

with a multiple correlation of 0.81 and partial correlations

0.79, 0.57 and 0.42 respectively.

It is interesting to note that the coefficient of ET in each of the three analyses in Ag Mems 770, 771 and 772 was close to 0.65, giving a degree of justification to this choice of factor.

Any comments or suggestions on this paper should be referred to the author.

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